

Message

From: Geller, Andrew [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=51DE0A18E67B4886A0020FE9C2E93F48-GELLER, ANDREW]
Sent: 10/11/2019 2:04:58 PM
To: Rodan, Bruce [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=Rodan, Bruce]; Orme-Zavaleta, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=3c5a111dc377411595e5b24b5d96146b-Orme-Zavaleta, Jennifer]; Dunlap, David [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=591eb15a268249dda0c05a7451f765c3-Dunlap, Dav]; Zartarian, Valerie [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=81096fe8dd024bdf935dec292bf44f9d-Zartarian, Valerie]; Schock, Michael [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=8aecc78bfe4a4b1aaea5db7146abb41f-Schock, Michael]; Lytle, Darren [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=fdde061dab3e4da78aacee87490f09b9-Lytle, Darren]; Brown, James [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=bb956ec2491e4620b3eef990a38a57b8-Brown, James_667f44daa6]; Xue, Jianping [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0a06bb7bb0a64633b7c68d6cae665b5a-Xue, Jianping]; Tornero-Velez, Rogelio [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4b901224c53043089da5fc3b792be3f7-Tornero-Velez, Rogelio]; Triantafyllidou, Simoni [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0c7062e9509a4c0d86074cb39f959d0c-Triantafyllidou, Simoni]; Kirrane, Ellen [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=59920da0a810496ab9a409b6338d85ac-Kirrane, Ellen]; Blackburn, Elizabeth [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=a080eb90549a453aaa6a357f5257c0b7-Blackburn, Elizabeth]
CC: Speth, Thomas [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=1772a8d7f6554ec79861c6225bd2507d-Speth, Thomas]; Parshionikar, Sandhya [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=76bf82eb615b4431a221461570392f98-SPARSHIO]; Pressman, Jonathan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=ae54e22dd36d4f34a8332b621c4b4d15-Pressman, Jonathan]; Maguire, Megan [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=6a013c79651d4a86afd93dfc45128ebb-maguire, Megan]; Saterson, Kathryn [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=e61cee56b6b14cafbdfbc146c3915212-Saterson, Kathryn]; Bradham, Karen [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=f16d1712cb294a4e8589f14474f356b6-Bradham, Karen]; Tornero-Velez, Rogelio [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=4b901224c53043089da5fc3b792be3f7-Tornero-Velez, Rogelio]; Tolve, Nicole [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5df597178ff54b8cb9c3edf239905634-Tolve, Nicole]; Hubal, Elaine [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=d871bc8ab3c94a7c9a4716a951aa70ec-Cohen-Hubal, Elaine]; Buckley, Timothy [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=197a3461d9824a17850f34cc2b0b37fe-Buckley, Timothy]; Medina-Vera, Myriam [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=b081a1f48a044b4c9d1ebc4992c54dee-Medina-Vera, Myriam]; Xue, Jianping [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=0a06bb7bb0a64633b7c68d6cae665b5a-Xue, Jianping]; Cashdollar, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=341010ea20014f059a33c49f880a7c36-Cashdollar, Jennifer]; Grimm, Ann [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=5c0a1601435d405699786fa8b4f2c07f-Grimm, Ann]; Kenneke, John [/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=6439ff5240f04a5baf0b4f03f1a35aba-Kenneke, John]; Guiseppi-Elie, Annette

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 (FYDIBOHF23SPDLT)/cn=Recipients/cn=e3743bd6f3c345baaae407c1d6f78e92-FRITHSEN, JEFF]; VanDrunick,
 Suzanne [/o=ExchangeLabs/ou=Exchange Administrative Group
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 Devereux, Richard [/o=ExchangeLabs/ou=Exchange Administrative Group
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Subject: Public release of Lead and Copper Rule with ORD support

The Agency made its public release of the Lead and Copper Rule yesterday, the first update of this rule since 1991. The docket is now open for public comment.

ORD played a significant role in supporting the development of multiple aspects of this rule: identifying lead service lines and corrosion control, drinking water sampling, exposure analysis, and health effects feeding into benefit:cost calculations. I've included a list of references with ORD contributors below.

Here are the links to the Federal Register notice and to a very good article about it from the Washington Post (thanks Valerie!):

https://www.epa.gov/sites/production/files/2019-10/documents/lcrr_prepub_frn_0.pdf

<https://www.google.com/amp/s/www.washingtonpost.com/climate-environment/2019/10/10/first-time-decades-epa-is-overhauling-how-communities-must-test-lead-water/%3foutputType=amp>

ORD's research supporting this rule highlights 2 different successes:

- 1) ORD's responsiveness to the Agency's immediate needs, with key collaborative papers informing new guidance for water sampling published in 2019 (Lytle, et al, 2019) and ground-breaking stochastic exposure-dose modeling (Zartarian, et al, 2017) used for the benefit:cost analysis. In addition, Kirrane and Patel (2014) shows EPA's analytical rigor in digging deep to insure that the Agency's regulatory analysis is based on the best, most vetted data and models available.
- 2) ORD's deep bench of scientific expertise and publication of enduring science. Good science does not have a shelf life. Significant results published in 1991, 1996, 2007, or 2011 are still relevant, and the expert scientists that ORD has on its staff are ready and willing to apply that expertise wherever and whenever needed, as we've seen recently in Newark, NJ.

Congratulations to all. The updated LCR and the updated Lead Dust Hazard Standard are significant achievements of the Federal Action Plan to Reduce Childhood Lead Exposure.

References included in LCR (my apologies if I missed additional ORD contributions – please tell me if there are more!)

Edwards and Triantafyllidou, 2007. M. Edwards, S. Triantafyllidou, Chloride-to-sulfate mass ratio and lead leaching to water. *J. Water Works Assoc.* 2007, 99, 96.*

Kirrane, E. F., & Patel, M. M. (2014). *Memorandum from EPA NCEA to ISA for Lead Docket: Identification and consideration of errors in Lanphear et al. (2005), "Low-Level Environmental Lead Exposure and Children's Intellectual Function: An International Pooled Analysis."*

Lytle, D.A. and Schock, M.R. (1996). Stagnation time, composition, pH and orthophosphate effects on metal leaching from brass. EPA/600/R-96/103 September 1996.

Lytle, D.A., Schock, MR, Wait, K, Cahalan, K, Bosscher, V, Porter, A, del Toral, M 2019. Sequential Drinking Water Sampling as a Tool for Evaluating Lead in Flint, Michigan. *Water Research*; Vol. 157, pp 40-54.

Schock, M.R., and Lytle, D.A. 2011. Chapter 20: Internal Corrosion and Deposition Control. *In Water Quality and Treatment*. 6th Edition. AWWA and McGraw-Hill, Inc.

Schwartz, J., & Otto, D. (1991). Lead and minor hearing impairment. *Archives of Environmental and Occupational Health*, 46(5), 300-305. doi:10.1080/00039896.1991.9934391

Zartarian, V., Xue, J., Tornero-Velez, R., & Brown, J. 2017. Children's Lead Exposure: A Multimedia Modeling Analysis to Guide Public Health Decision-Making. *Environmental Health Perspectives*, 125(9). doi:10.1289/EHP1605

* Produced before Simoni Triantafyllidou was at EPA, but worth celebrating!

Sincerely,
Andrew

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Ex. 6 Personal Privacy (PP)